REMARKS

The Office Action mailed on August 18, 2009, has been received and its contents carefully considered. Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the following remarks. Upon entry of the present Reply, Claims 68, 69, 71 and 73-77 are pending in the present application. Claims 68, 69, 71 and 73-77 stand rejected. Claim 68 has been amended by way of the present response. Applicant submits that upon entry of the present Reply, Claims 68, 69, 71 and 73-77 are in condition for allowance. Moreover, Applicant submits that no new matter has been introduced by the foregoing amendments.

Rejections under 35 U.S.C. §112

Claims 68, 69, 71, and 73-77 stand rejected under 35 U.S.C. 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected to make and/or use the invention. Claims 68, 69, 71, and 73-77 stand rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, the Examiner alleges that the (c) receiving information . . . , (e) updating information . . . , (f) calculating . . . , and (g) outputting the adjusted second flight plan steps of independent Claim 68 are not supported by the specification. Further, the Examiner alleges that the statements of intended use or field of use, "capable of" clause provides language that suggests or makes optional but does not require steps to be

performed or does not limit the scope of a claim or claim limitation, and accordingly the metes and bound of the claim can not be ascertained by one having ordinary skill in the art.

Applicant respectfully traverses these rejections for at least the following reasons. Claims 68, 69, 71, and 73-77 are fully supported by Applicant's specification.

Step (c) "receiving information. . . ," is at least supported by paragraphs 0032-0034 and 0040, including "Input is acquired online or offline....," (paragraph 0032); and "The nature of the input data and sources . . . , such as reservations, meteorological, **dispatch (routing diversion and alterative planning)** . . . ," (paragraph 0033, emphasis added); and "Input is manipulated internally and integrated through . . . ," (paragraph 0034); and Pilot 400 **receives information as Input 402** from flight operations regarding flight plan . . . ," (paragraph 0040, emphasis added). Each of these passages at least provides support for step (c) of "receiving information . . ." as disclosed in independent Claim 68.

Step (e) "updating information . . . ," is at least supported by paragraphs 0040-0041, including "acquires information about crew scheduling and other limitations . . . ," (paragraph 0040); and "the weather information from Input 504 given to Pilot 500 is adjusted . . . ," (paragraph 0041); and "flight operations plan from Input 502 **is adjusted accordingly to the weather . . . the crew limits . . . the maintenance . . . the load . . . and the passengers.**" (paragraph 0041, emphasis added). Each of these passages at least provides support for step (e) of "updating information . . . ," as disclosed in independent Claim 68.

Step (f) "calculating . . . ," is at least supported by paragraphs 0029 and 0035, including **"manipulate data** . . ." (paragraph 0029, emphasis added); and "a unit of data, or **calculation**, is presented as input . . . or **modified by adding another unit of data or calculation** . . ." (paragraph 0035, emphasis added). Each of these passages at least provides support for step (f) of "calculating . . . ," as disclosed in independent Claim 68.

Finally, step (g) "outputting the adjusted second flight plan" is at least supported by paragraphs 0036-0038, including "Process information is presented as **factual output** . . . , (paragraph 0036, emphasis added); and "**Output solutions can include flight planning, en route decision making** moderated by weather and operating factors . . . , (paragraph 0037, emphasis added); and "**Output can be presented directly or indirectly** . . . , (paragraph 0040, emphasis added). Each of these passages at least provides support for step (g) "outputting the adjusted second flight plan" as disclosed in independent Claim 68.

Regarding the "capable of" clause of Independent Claim 68; Claim 68 has been amended by way of the present response to address the Examiner's concerns. Applicant submits that Claim 68, as amended is now in condition for allowance. Since dependent Claims 69, 71 and 73-77 depend directly from independent Claim 68, Applicant respectfully submits that Claims 69, 71 and 73-77 likewise allowable.

Accordingly, Applicant respectfully requests that the §112 rejections of Claims 68, 69, 71, and 73-77 be withdrawn.

Rejections under 35 U.S.C. §103

Claims 68, 69, 71, and 73-77 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U. S. Patent No. 4,642,775 to Cline et al. (hereinafter referred to as "Cline").

Applicant respectfully traverses these rejections for at least the following reasons.

Independent Claim 68 is the sole independent claim presently under consideration. Cline, alone or in combination, does not teach or suggest every element recited in independent Claim 68, as amended.

The rejection of Claims 68, 69, 71 and 73-77 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Cline is respectfully traversed.

Claim 68 recites:

> A method of providing to and for use by an aircraft aviation professional a lightweight and easily manipulated electronic flight bag, said method comprising the steps of: (a) providing a transportable laptop computer to be carried by the aviation professional for use within at least one of an aircraft and an airport, in a carry bag; (b) programming the transportable laptop computer with linear and non-linear algorithms and operating programs to at least: process flight information, manipulate flight related data in a non-linear algorithm thereby aiding in flight decision-making processes resulting in solutions to flight related mathematical computations and runway selections and aircraft operating parameters and procedures, calculate pilot fatigue limits and scheduling issues and fuel computations, and provide data displays to the aviation professional; (c) receiving information for a first flight plan from a flight operations, wherein the information for the first flight plan includes a departure runway information, destination information, alternate airports information, and fuel time information; (d) inputting aircraft and flight

> related data into the transportable laptop computer using an input device, wherein the aircraft and flight related data includes weather information for the first flight plan, aircraft crew scheduling information, aircraft maintenance information, aircraft load weight and balance information, and aircraft manifest information; (e) updating information that includes the weather information, the aircraft crew scheduling information, the aircraft maintenance information, the aircraft load weight and balance information and the aircraft manifest information on a continuous basis using the transportable laptop computer; (f) calculating using the transportable laptop computer while en route an adjusted second flight plan based on the continuously updated information, wherein the adjusted second flight plan is substantially different than the first flight plan; and (g) outputting the adjusted second flight plan while en route to the aviation professional using at least one of an interactive headgear worn by the aviation professional, a translucent display coupled to the transportable laptop computer and an aircraft control system.

Cline does not describe or suggest every element recited in Claim 68. Rather, in contrast to the present invention, Cline describes a flight planning system that utilizes a portable computer (40) that includes a modem (51) that may be connected in communication to **a ground-based flight data center (30)**. The computer (40) also includes input devices, such as a keyboard (44), and output devices such as an LCD (42) and a disk drive (52). The ground-based data center (30) generates a flight plan, which is transmitted over a telephone line (48) to the computer (40) and loaded onto a disk (54) by a pilot of an aircraft (10). **The disk (54) may then be physically carried by the pilot** to the aircraft (10) and inserted into the on-board data management unit (20), which then makes the flight plan available to a flight management computer (14). As a result, the flight plan does not need to be manually entered into an onboard navigation system.

The pilot may enter, or input, information related to a flight plan into the computer (40). As stated in Col. 6, lines 59-68 and Col. 7, lines 1-10, such information includes:

> (1) aircraft registration number; (2) type of aircraft; (3) basic operating weight; (4) taxi fuel weight; (5) reserve fuel weight; (6) preferred mach/TAS; (7) direct operating cost; (8) fuel price per gallon; (9) maximum allowable fuel; (10) departure airport; (11) departure time; (12) destination airport; (13) route preference; (14) payload weight; (15) fuel on board; (16) performance bias; (17) weather requests; and (18) message entry.

Next, the pilot connects the computer (40) to the ground-based data center (30) using the **telephone lines** (48) and the modem (51). Notably, the flight plan described in Cline **is computed at the ground-based data center (30)**. Most notably, once the pilot receives, reviews and selects one of the flight plans computed by the ground-based data center (30), the flight plan is transferred onto the disk (54), the computer (40) is shutdown by the pilot and packed away, and then the pilot boards the aircraft (10). Once on board the aircraft (10), the pilot uploads the flight plan from the disk (54) to the on-board data management unit (20) using an on board data transfer unit (18). **As a result, the computer (40) is <u>not</u> used on the aircraft (10) <u>en route</u>**. As stated in Col. 8, lines 14 – 20:

> Once the pilot has finished reviewing the flight plan data and weather that is displayed on the display unit (42), the disk (54) is ejected from the disk drive (52) and transferred to the data transfer unit (18) in the cockpit by the pilot. **The portable computer (40) can then be stored in any convenient location such as the aircraft baggage compartment.**

Notably, Cline is silent regarding "updating information that includes the weather information, the aircraft crew scheduling information, the aircraft maintenance

information, the aircraft load weight and balance information and the aircraft manifest information **on a continuous basis using the transportable laptop computer**," as recited in Claim 68. Moreover, Cline is silent regarding "calculating using the transportable laptop computer **while en route** an adjusted second flight plan **based on the continuously updated information**, wherein the adjusted second flight plan is substantially different than the first flight plan," as recited in Claim 68. Further, Cline is silent regarding "**outputting the adjusted second flight plan while en route** to the aviation professional using at least one of an **interactive headgear worn by the aviation professional, a translucent display coupled to the transportable laptop computer and an aircraft control system**," as recited in Claim 68. As a result, Cline does not describe or suggest every element recited in Claim 68.

To the contrary, the "portable computer" in Cline is not used as an in-flight component of any flight system, but rather strictly on the ground. Further, as stated in Cline Col 8, lines 1-13:

> "Once the computer **has been disconnected** from the data center, the pilot **can review** on the display various factors relating to the generated flight plan. The data available **for review** includes: the pilot inputs, route description, flight levels, aircraft weights, fuel parameters. A leg by leg display of the flight plan is also provided that includes for each leg: flight level, distance, estimated time enroute (ETE), magnetic course, predicted fuel burn, predicted fuel flow, predicted ground speed, predicted true airspeed (TAS), forecast wind, forecast outside air temperature, predicted remaining fuel, predicted remaining flight distance and predicted remaining flight time." (emphasis added).

Therefore, the text items displayed can only be **reviewed** by the pilot, **not manipulated, integrated, or revised**. Further, the review function in Cline is only done after the computer is **disconnected** from the data center. To the contrary, the present

invention is not limited to a set of pre-flight data inputs, but rather can integrate additional information in-flight, and allows for manipulation of data, rather than simple review. As a result, Cline does not describe or suggest every element recited in Claim 68.

For at least the reasons set forth above, Applicant respectfully submits that independent Claim 68 is patentable over Cline. Since dependent Claims 69, 71 and 73-77 depend directly from independent Claim 68, Applicant respectfully submits that Claims 69, 71 and 73-77 likewise are patentable over Cline.

Accordingly, Applicant respectfully requests that the 103 rejection of Claims 68, 69, 71 and 73-77 be withdrawn.

CONCLUSION

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds of rejection are believed to have been overcome. The application, as amended, is believed to be in condition of allowance. An early and favorable action to that effect is respectfully requested.

Respectfully Submitted,
Maier & Maier, PLLC

/Timothy J. Maier/
Timothy J. Maier
Reg. No. 51,986

Maier & Maier, PLLC
1000 Duke Street
Alexandria, VA 22314
(703) 740-8322